Marketing the Environmental Benefits of Renewable Power

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The Problem

- Making electricity is the largest industrial source of air pollution.
 - 2/3 SOx
 - 1/4 NOx
 - 2/5 CO2
 - 1/3 Mercury

The Paradox of Clean Energy

- The benefits are substantial, but making claims may require restraint and modesty.
- For example, wind and solar power produce no air pollution, but they don't reduce all forms of air pollution.
- The air-quality benefits of renewable energy are not fully recognized in cleanair regulations

Legal Guidance— Consumer Protection Statutes

- Marketing and PR are commercial speech.
 - Forget the First Amendment.
- The truth can be misleading.
 - "Materiality."
- It's not just what you say, it's what the buyer thinks you are saying.
 - What's the rule in your state, "reasonable consumer" or "gullible consumer"?
- FTC Green Guides
 - http://www.ftc.gov/bcp/grnrule/guides980427.htm
- NAAG Guidelines on renewable power
 - http://www.naag.org/issues/pdf/Green Marketing guidelines.pdf

Guiding Principles

- You are selling virtue behave virtuously.
 - You are asking your customers to pay more to secure a social good—does your company also behave in that way?
- Transparency is necessary.
 - Information is good.
 - Types of generation.
 - Location of generation.
 - Method of calculating reductions.
 - Relevant corporate behavior.

A summary of the environmental bona fides of renewable energy

- Produces no air emissions.
 - Or produces reduced air emissions compared to fossil generation.
 - Or results in no "net" greenhouse gas emissions.
- Displaces other, potentially dirtier, generation.
 - May reduce pollution—more later.
- Is sustainable.
 - It is "renewable," after all.
 - May be issues with some biomass and geothermal.
- Does not require mining or drilling.
 - Geothermal is an exception.
- Requires no water for cooling.
 - Important benefit or those in the water-short West.
 - Geothermal and biomass are exceptions.



- Broad claims may not be appropriate.
- Need to assess regulatory treatment of pollutants.
- Consider the magnitude of reductions materiality.

Sterling Green™ Renewable Electricity Agway Energy Products Product Content Label NiMo & NYSEG Service Area

Energy Resources in Sterling Green**
Renewable Energy Offering for New York*

Options	Option 1 100% Renewable Energy	Option 2 50% Renewable Energy	Generation Location
Price" Per Kilowatt Hour	1.5 cents for 100% of your use	for 50%	
Storling Groon's Renewable Er	ergy Resources		
New Wind	40%	20%	New York
Eligible Hydroelectric*	30%	15%	New York
Bioenergy/Plant Material*	30%	1596	New York
Geothermal	044	0%	New York
Solar	044	0%	New York
Other Energy Resources			
Coal	044	16.5%	New York
Large Hydraelectric	044	4.5%	New York
Natural Gas	049	13%	New York
Nuclear	0%	9%	New York
01	044	6.5%	New York
Other	0%	0.5%	New York
Total	100%	100%	New York

- 1 These figures reflect the power that we have contracted to provide. Actual figures may vary according to resource variability. We will annually report to you the actual resource mis of the electricity you purchased during the decedding year.
- 2 New renewables are generation facilities in operation on or after January 1, 1999.
- 3 Eligible hydroelectric facilities are defined as facilities with output equal to or less than 30 resignarities, indicates by PERC after 1995 or cartified by the Law Impact Hydropower Indiffuse hower boving actification on.
- 4 Our bioenergy is electricity made from recovered methone from landfills and/or clean wood waste and brest residue that would intervise be unused. No trees are out sown for the direct purpose of fixeling electricity generation.
- 5 The portion of your electricity purchase that is not enrolled in Sterling Green ** will come from Agrecy's conventional electricity resources. For comparison, Agrecy's current average mix of energy resources for electricity generation is natural gas, 29%; nuclear, 15%; hypracelectric, 5%; cool, 35%; od, 15%; and other, 1%.

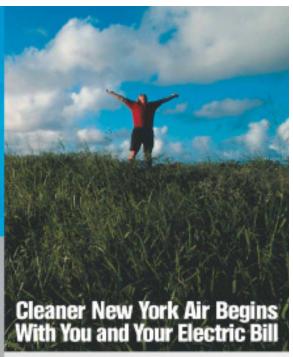
The Green-e program certifies that Sterling Green¹⁴ New York meets the intrinsium environmental and consumer protection standards established by the non-crefit Center for Resource Soutions. For more information on Green-e certification requirements, call 1-888-85 SREEM or top on to work-green-e.org.

*This small per IWM renewable energy surchange will be added to Aqway's basic variable rate to help support deaner, more seque, New York-based renewable energy. This sunchange is in addition to Aqway's basic charge for electricity addition to Aqway's basic charge for electricity nativities.

Choose Sterling Green." Choose Cleaner Air.

Agway Energy Products and Sterling Planet have partnered to give New Yorkers like you a new cleaner electricity choice. We offer Sterling Green™— a Green-e certified blend of renewable electricity produced in New York state using wind, water, and decaying organic matter for fuel.

Buying Sterling Green™ means you're supporting electricity produced in a way that emits far less air pollution. You're conserving natural resources like oil and other fossil fuels. You're contributing to energy diversity, independence and sustainability. And you're doing your part to stimulate new in-state electricity production.



Choose Sterling Green." Choose Cleaner Air.





www.agwayenergy.com 1.888.AGWAY24

Criteria Air Pollutants—No allowances means no reductions

- Sulfur dioxide (SOx)
 - National regulation; cap-and-trade.
 - Allowances to fossil generators only.
 - Fossil generation may back down, but allowance can be used later.
- Oxides of Nitrogen/Smog (NOx)
 - Regional regulation (29 states); cap-and-trade.
 - Limited set-asides for renewables.

Press Release—State Govt

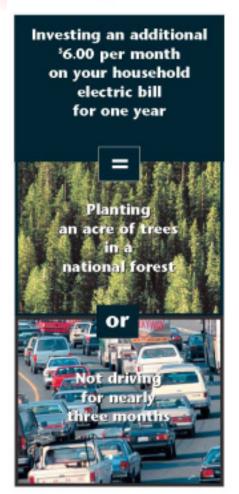
When fully implemented, the RPS is also expected to reduce air emissions of nitrogen oxide by 6.8 percent, sulfur dioxide by 5.9 percent, and carbon dioxide by 7.7 percent throughout the State. Along with the significant emission reductions that will improve the State's environment, the State will see a boost in economic development activity from the growth of the renewable energy industry in the State.

NYSERDA, Feb 7, 2005

Greenhouse Gases, notably carbon dioxide (CO2)

- Today, most carbon claims are an inference, based on an assumption, relying on an estimate.
- Nonetheless, they are reasonable and can be substantiated.
- EPA Green Power Partnership
- EPA Climate Leaders
- DOE Greenhouse Gas Registry proposed rules
 - 1605(b)

...How's this for environmental impact?





Your participation in Green Power really does make a difference...





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Greenhouse Gases

- What is the right estimate for CO2 reductions?
 - Regional average.
 - Regional average for fossil units.
 - Regional average of marginal units.
 - Be consistent.
 - Follow guidance of credible expert.
 - EPA website being developed.
- The climate problem is global, so location of renewable generation is not an issue in making claim.
 - CO2 reduction per mwh will vary by region.

Greenhouse Gases (cont'd)

- What would happen if GHG were regulated?
 - If renewables get allowances, allowance must be retired to make clean-air claim.
 - If renewables don't get allowances, develop an estimate based on the calculation used in setting the cap.

Health Claims—Risky Behavior

- Will the reductions in pollution (smog and mercury would be two examples) resulting from the operation of a renewable facility occur where your customers live?
- Are the reductions in pollution sufficient to be able to demonstrate a reduced risk to human health?
- Do you have substantiation?
 - Operation of the grid.
 - Pollution data.
 - Epidemiological studies.



- Weighing two business risks simultaneously:
 - Failure to attract the attention of prospects (and hold the attention of customers).
 - Attract the attention of regulators or press.